

## ABSTRACT

This invention provides a process for preparing a reactive graphite-like layered material with high chemical reactivity while maintaining stability of a base material. In the preparation process according to this invention, first, the treatment for reducing the number of dangling bonds in the vicinity of the vacancy to form an introducing site is conducted by binding atoms together with each other, which atoms are adjacent to a vacancy in a graphite-like layered material. Then, atoms 3 and 4 to be introduced, i. e., a diatomic molecule made of atoms constituting the graphite-like layered material are introduced into the introducing site formed in advance. Then, new bonds are generated between introduced atoms 3, 4 and the graphite-like layered material.